

Remarks

Rejection under 35 U.S.C. §112

Claims 19 and 21 stand rejected under 35 U.S.C. §112, first paragraph as the specification allegedly does not reasonably provide enablement for the claims. Without acquiescence to Examiner's statements regarding the failure of the specification to provide the requisite enablement to support the claims, Applicants have proposed cancelling Claims 19 and 21 in order to expedite prosecution and limit the pending issues.

Applicants expressly reserve the right to file and prosecute claims to any presently cancelled subject matter in a continuation application.

Rejection under 35 U.S.C. §102

Claims 1-4, 6-8, and 15-18 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by compounds 11a and 13a of *Tewari et al.*, Anorg. Chem. Org. Chem.; 35(1): pp. 95-98 (1980). Compounds 11a and 13a of *Tewari* comprise an unsubstituted phenyl moiety at the position occupied by the variable "Ar" of the present invention. However, as evident by Claim 1, such unsubstituted phenyl moieties are outside the scope of the present claim limitations. The compound of Applicants' invention wherein the variable "Ar" constitutes a phenyl moiety, must contain either an "R2" group at the meta position (wherein the definition of R2 does not encompass hydrogen) or a hydroxyl group at the ortho position. As such, compounds 11a and 13a of *Tewari* are not within the scope of the present invention and, therefore, *Tewari* does not anticipate the present claims under 35 U.S.C. §102(b).

Rejection under 35 U.S.C. §103

Claims 1-9 and 14-18 stand rejected under 35 U.S.C. §103 as allegedly being unpatentable over *Tewari et al.* and *Takagi et al.*, in view of *King*. Applicants respectfully submit that the Examiner's position does not satisfy the legal requirements for establishing a *prima facie* case of obviousness of the present invention and courteously request reconsideration in view of the following.

A claimed invention is unpatentable if the differences between it and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the pertinent art. *In re Kahn*, 441 F.2d 977, 985 (Fed Cir. 2006) (see also MPEP §2141.02 (I), citing *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530 (Fed Cir. 1983)). The burden is on the Patent Office to show a *prima facie* case of obviousness,

which may be shown by: (1) a suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; and (2) a reasonable expectation of success; M.P.E.P. §2143.01-.02. Furthermore, obviousness must be assessed as of the time the invention was made, and without reference to the applicants' disclosure, to protect the inventor from hindsight reasoning.

In re Vaeck, 20 USPQ2d 1438 (Fed Cir 1991)

When considering whether a chemical invention "as a whole" is obvious, the compound along with all of its properties must be considered. *In re Papesch*, 315 F2d 381, 291 (CCP 1963).

In determining whether the invention as a whole would have been obvious . . . we must first delineate the invention as a whole. In delineating the invention as a whole, we look not only to the subject matter which is literally recited in the claim in question . . . but also to the properties of the subject matter which are inherent in the subject matter and are disclosed in the specification . . . Just as we look to a chemical and its properties when we examine the obviousness of a composition of matter claim, it is the invention as a whole, and not some part of it, which must be obvious under 35 U.S.C. §103.

MPEP §2141.02 (I) (citing *In re Antonie*, 559 F.2d 618, 620 (CCPA 1977). In the present case, Applicants have discovered and disclosed compounds of Formula I that are modulators of nuclear hormone receptors, and particularly of the mineralocorticoid and glucocorticoid receptors, that are useful for treating human disease. Significantly, neither the *Tewari* nor the *Takagi* reference relied upon by the Examiner recognizes or otherwise implies that compounds of Formula I, or structural variants thereof, have any biological activity whatsoever. Thus, Examiner has not established that the cited references are either in the field of Applicants' endeavor or reasonably pertinent to the problem which Applicants were concerned. *In re Kahn* at 987 (citing *In re Oektiker*, 977 F.2d 1443, 1447 (Fed Cir. 1992))

Examiner alleges that the motivation to make the compounds of Applicants' invention "is from knowing that H and alkyl are equivalents, replacing CH₂ or O with S would produce compounds having similar biological properties, and from the expectation that position isomers would have similar biological and/or chemical properties." (Official Action, dated 10/12/2007, p.7). However, without acquiescence to Examiner's statements regarding chemical equivalents, bioisosteres, or positional isomers, Examiner's reasoning fails to take into account that neither *Tewari* nor *Takagi* reveal or suggest that the compounds disclosed therein have any biological properties in the first instance. Applicants respectfully submit that the proper inquiry is whether "an artisan of ordinary skill in the art at the time of the invention, confronted by the same problems as the inventor and with no knowledge of the claimed invention, [would] have selected the various elements from the prior art and combined them in the manner claimed." *In re Kahn* at

988 (citing *Princeton Biochemicals, Inc. v. Beckman Coulter, Inc.*, 411 F.3d 1332 (Fed Cir. 2005)) Here, the general problem faced by the inventors was the identification of therapeutic agents, and particularly those capable of modulating nuclear hormone receptors. However, because the cited references do not concern the medicinal arts, one skilled in the art, without knowledge of the Applicants' disclosure, would have had no motivation to modify the compounds of *Tewari* or *Takagi* at the time Applicants invention was made.

Even if one skilled in the art would have considered *Tewari* or *Takagi* as pertinent to Applicants' field of endeavor, and was further motivated to modify the reference teachings in the manner suggested by Examiner, one would have done so without any expectation of success in identifying a therapeutic agent, and particularly one for the modulation of nuclear hormone receptors. Again, the cited references contain no biological data associated with the disclosed compounds and further provide no recognition or suggestion that any the compounds disclosed therein have any biological or therapeutic activity.

For all of the reasons above, Applicants respectfully submit that one skilled in the art of Applicants' field of endeavor, at the time of the present invention, would not have considered the cited art pertinent to the problem faced by the Applicants. Furthermore, it is respectfully submitted that the cited art nonetheless fails to provide the requisite motivation to modify the reference teachings and the reasonable expectation of success, necessary to support a *prima facie* determination of obviousness.

Applicants courteously request reconsideration of the present application in view of the amendments and arguments presented herein, and passage of the case to allowance.

In the event the Examiner intends to once again reject the present invention under 35 U.S.C. §103(a), or if verbal discussion would be of any assistance in advancing prosecution of the present application, Applicants' undersigned attorney invites the Examiner to telephone him at the number provided.

The shortened statutory period for response to the present Official Action dated October 12, 2007 was set to expire on January 12, 2008. However, as January 12th fell on a Saturday, it is respectfully submitted that the submission of the present response on Monday, January 14 is timely and that no extension fees are necessary. Nonetheless, in the event that any fees are required by 37 C.F.R in association with the filing of the present response, please charge such fees to Deposit Account No. 05-0840.

Respectfully submitted,

/Alexander Wilson/
Alexander Wilson
Attorney for Applicants
Registration No. 45,782
Phone: 317-277-0190

Eli Lilly and Company
Patent Division/AW
P.O. Box 6288
Indianapolis, Indiana 46206-6288

January 14, 2008